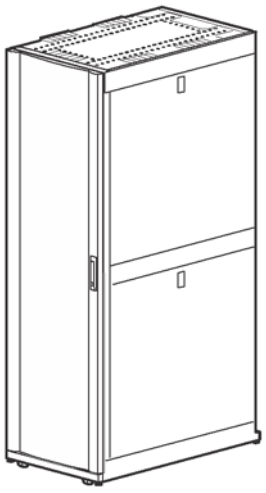
Racks and Enclosures

NetShelter™ SX Cabinet

Installation and Customization

990-2183F-001

Publication Date: April 2014



Schneider Electric

Schneider Electric Legal Disclaimer

The information presented in this manual is not warranted by Schneider Electric to be authoritative, error free, or complete. This publication is not meant to be a substitute for a detailed operational and site specific development plan. Therefore, Schneider Electric assumes no liability for damages, violations of codes, improper installation, system failures, or any other problems that could arise based on the use of this Publication.

The information contained in this Publication is provided as is and has been prepared solely for the purpose of evaluating data center design and construction. This Publication has been compiled in good faith by Schneider Electric. However, no representation is made or warranty given, either express or implied, as to the completeness or accuracy of the information this Publication contains.

IN NO EVENT SHALL SCHNEIDER ELECTRIC, OR ANY PARENT, AFFILIATE OR SUBSIDIARY COMPANY OF SCHNEIDER ELECTRIC OR THEIR RESPECTIVE OFFICERS, DIRECTORS, OR EMPLOYEES BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL, OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS, CONTRACT, REVENUE, DATA, INFORMATION, OR BUSINESS INTERRUPTION) RESULTING FROM, ARISING OUT, OR IN CONNECTION WITH THE USE OF, OR INABILITY TO USE THIS PUBLICATION OR THE CONTENT, EVEN IF SCHNEIDER ELECTRIC HAS BEEN EXPRESSLY ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SCHNEIDER ELECTRIC RESERVES THE RIGHT TO MAKE CHANGES OR UPDATES WITH RESPECT TO OR IN THE CONTENT OF THE PUBLICATION OR THE FORMAT THEREOF AT ANY TIME WITHOUT NOTICE.

Copyright, intellectual, and all other proprietary rights in the content (including but not limited to software, audio, video, text, and photographs) rests with Schneider Electric or its licensors. All rights in the content not expressly granted herein are reserved. No rights of any kind are licensed or assigned or shall otherwise pass to persons accessing this information.

This Publication shall not be for resale in whole or in part.

Table of Contents

Introduction 1

Unpack the Cabinet 2

- Disclaimer 2
- Inspection 2
- Please Recycle 2

Important Safety Information 2

- Safety Instructions 3
- Labels 3

Component Identification 4

Cabinet 4

- Hardware Bag 5

Side Panels, Roof, and Doors 6

- Side Panels 6
- Roof 6
- Door Removal 7
- Door Installation 7

Cabinet Installation 8

Move the Cabinet 8

Level the Equipment 9

Join the Cabinets 10

Reverse the Front Door 11

Secure the Cabinet 13

Ground the Cabinet 14

- Bonding Locations on the Cabinet 14

Equipment Installation 15

Adjust the Vertical Mounting Flanges 15

Position the Vertical Mounting Flanges 15
Vertical Mounting Flange Adjustment 16

Install the Equipment 18

To install rack-mount equipment in the cabinet: 18
Installing cage nuts 18
Removing cage nuts 18

Remove the Cable Cutout Covers 19

Cable Management 20

Accessory Channel 20

Specifications 21

42U Cabinets 21

42U Cabinets, continued 22

45U Cabinets 23

45U Cabinets, continued 24

48U Cabinets 25

48U Cabinets, continued 26

Limited Factory Warranty 27

Terms of Warranty 27
Non-transferable Warranty 27
Exclusions 27
Warranty Claims 27

Introduction

The Schneider Electric NetShelter SX 600 mm (23.6 in.) and 750 mm (29.5 in.) wide cabinets are high-quality cabinets for storage of industry-standard (EIA/ECA-310), 19 in. (483 mm) rack-mount hardware, which includes servers and voice, data, networking, internetworking, and power protection equipment.

Optional vertical mounting flanges are available for the 750 mm (29.5 in.) wide cabinet for accommodating 23 in. EIA/ECA telecommunications equipment.

This manual covers the following NetShelter SX cabinets:

- NetShelter SX 42U, 600 mm wide, 1070 mm deep cabinet (AR3100)
- NetShelter SX 42U, 750 mm wide, 1070 mm deep cabinet (AR3150)
- NetShelter SX 42U, 600 mm wide, 1200 mm deep cabinet (AR3300)
- NetShelter SX 42U, 750 mm wide, 1200 mm deep cabinet (AR3350)

- NetShelter SX 45U, 600 mm wide, 1070 mm deep cabinet (AR3105)
- NetShelter SX 45U, 750 mm wide, 1070 mm deep cabinet (AR3155)
- NetShelter SX 45U,600 mm wide, 1200 mm deep cabinet (AR3305)
- NetShelter SX 45U, 750 mm wide, 1200 mm deep cabinet (AR3355)

- NetShelter SX 48U, 600 mm wide, 1070 mm deep cabinet (AR3107)
- NetShelter SX 48U, 750 mm wide, 1070 mm deep cabinet (AR3157)
- NetShelter SX 48U, 600 mm wide, 1200 mm deep cabinet (AR3307)
- NetShelter SX 48U, 750 mm wide, 1200 mm deep cabinet (AR3357)

Unpack the Cabinet

Disclaimer

Schneider Electric is not responsible for damage sustained during reshipment of this product.

Inspection

Inspect the packaging and contents for shipping damage. Make sure that all parts are accounted for. Report any damage immediately to the shipping agent. Report missing contents, damage, or other problems immediately to Schneider Electric or your reseller.

Please Recycle

The shipping materials are recyclable. Save them for later use, or dispose of them appropriately.

Important Safety Information

Read the instructions carefully to become familiar with the device before trying to install, operate, service or maintain it. The following messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.

The addition of this symbol to a Danger or Warning safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER
DANGER indicates an imminently hazardous situation which, if not avoided, **will result in** death or serious injury.

⚠ WARNING
WARNING indicates a potentially hazardous situation which, if not avoided, **can result in** death or serious injury.

⚠ CAUTION
CAUTION indicates a potentially hazardous situation which, if not avoided, **can result in** minor or moderate injury.

CAUTION
CAUTION, used without the safety alert symbol, indicates a potentially hazardous situation which, if not avoided, **can result in** equipment damage.

NOTICE
NOTICE addresses practices not related to physical injury including certain environmental hazards, potential damage or loss of data.

Safety Instructions

This manual contains important instructions that must be followed during the installation and customization of the cabinet.

⚠WARNING

TIP HAZARD

- This cabinet is easily tipped. Use extreme caution when unpacking or moving.
- Use at least two people to unpack and move the cabinet.
- Before moving the cabinet on its casters, load 158 kg (350 lb) of equipment into the bottom of the cabinet for extra stability.
- When moving on its casters, make sure the leveling feet are up and push the cabinet from the front or rear.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

⚠WARNING

HEAVY EQUIPMENT

Use at least two people to unpack the cabinet.

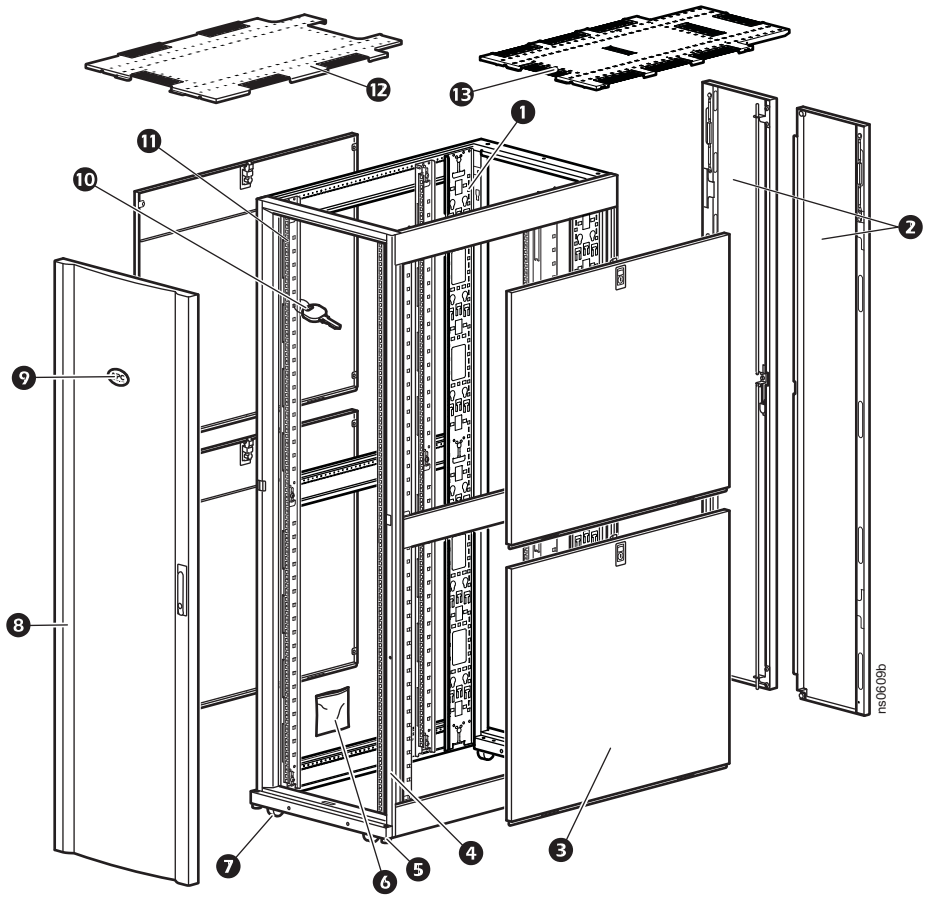
Failure to follow these instructions can result in death, serious injury, or equipment damage.

Labels

Look for additional safety information affixed to the cabinet. See “Labels” on page 8 for more information.

Component Identification

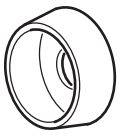
Cabinet



1. Adjustable vertical 0U accessory channel*
2. Removable rear split doors
3. Removable side panel with lock
4. Cabinet frame
5. Adjustable leveling feet
6. Hardware bag (see page 5)
7. Casters
8. Removable and reversible front door
9. Nameplate (if equipped)
10. Key for doors and side panels
11. Vertical mounting flanges
12. 1070 mm (42.13 in.) roof
13. 1200 mm (47.24 in.) roof

* 1200 mm (47.24 in.) deep cabinets include four vertical 0U Accessory Channels.

Hardware Bag



Plastic cup washer (60)

M6 x 16 Phillips slot screw (60)

M5 x 12 screw (4)

Cage nut (60)

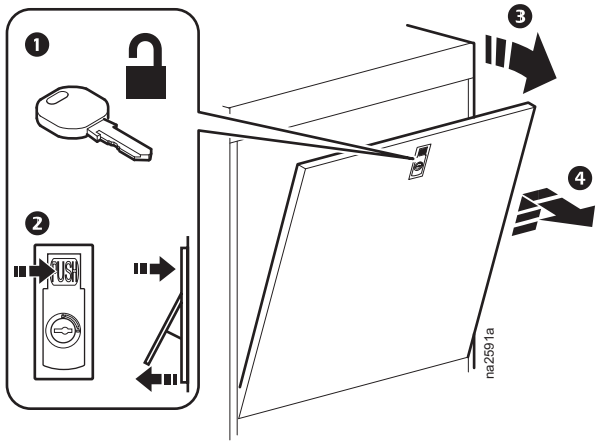
7 mm (0.28 in.) hole plug (4)

TORX® T30/#2 Phillips tool

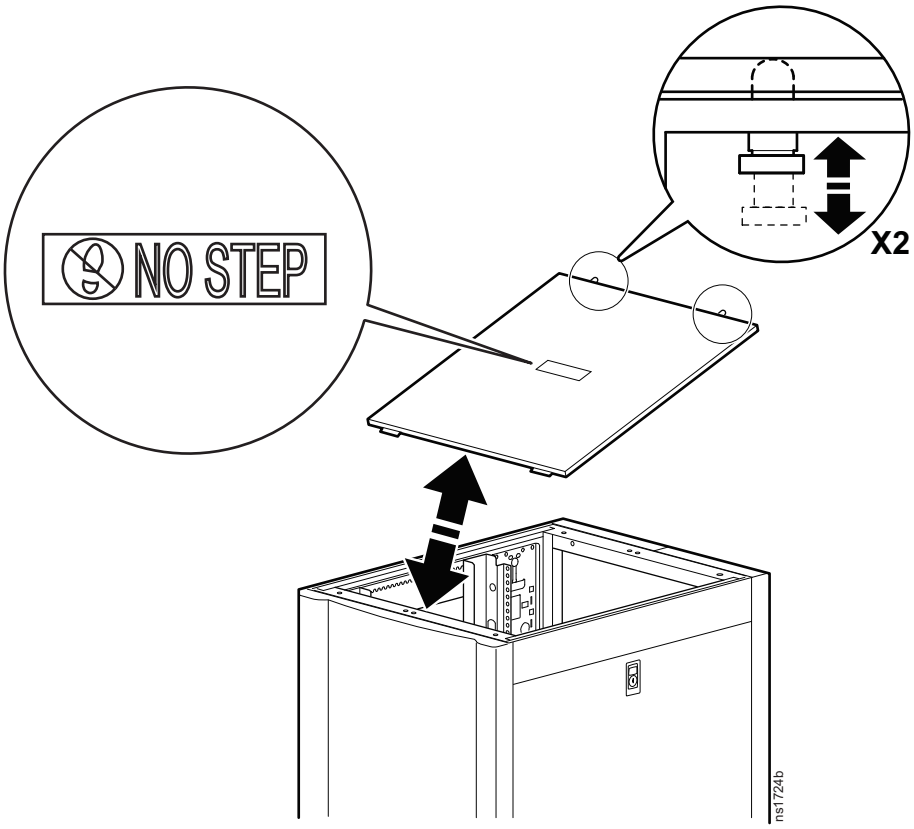
Cage nut tool (1)

Side Panels, Roof, and Doors

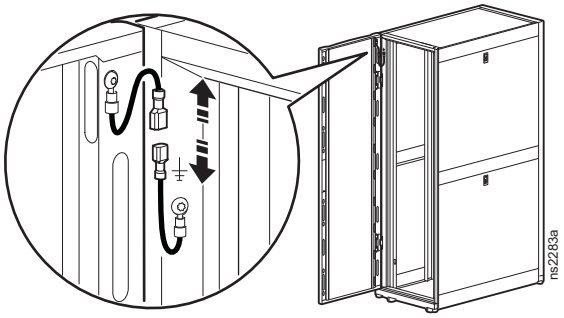
Side Panels



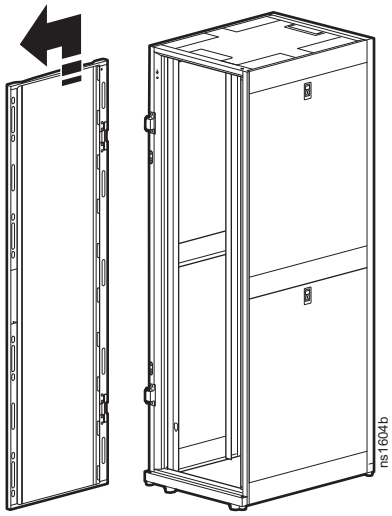
Roof



Door Removal

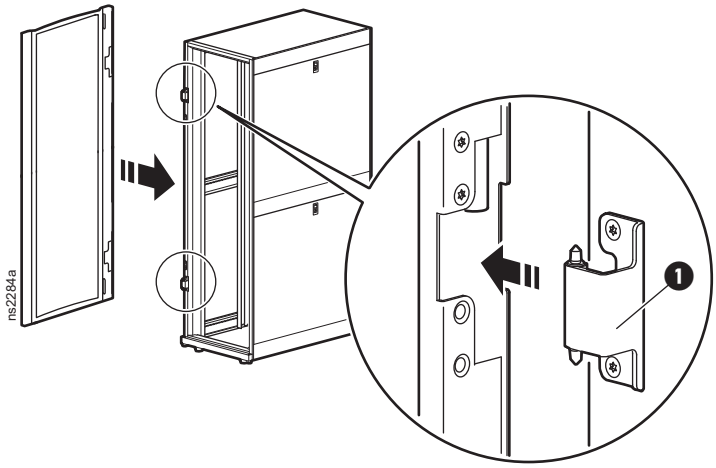


1. Unlock the cabinet front door handle and open the door.
2. Disconnect the ground wire and any other wire connections that may interfere with the removal of the doors.



3. The hinges come apart by lifting upward and outward. Slowly lift and pull the door from the cabinet until the hinge pins on the door are free of the hinges on the cabinet frame.

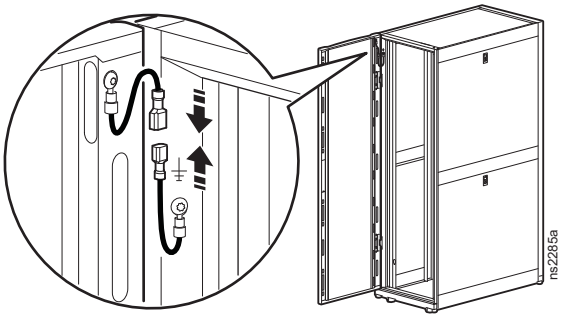
Door Installation



1. The doors self-align on hinge pins when properly installed. With the door at a 90 degree angle to the front of the cabinet, position the door over the hinge pins ❶.

2. Slowly lower the door into the cabinet frame ensuring that the door hinges correctly align to the cabinet frame hinges.

3. Connect the ground wire and any other wire connections.



Cabinet Installation

Move the Cabinet

⚠WARNING

TIP HAZARD

- This cabinet is easily tipped. Use extreme caution when unpacking or moving.
- Use at least two people to unpack and move the cabinet.
- Before moving the cabinet on its casters, load 158 kg (350 lb) of equipment into the bottom of the cabinet for extra stability.
- When moving on its casters, make sure the leveling feet are up and push the cabinet from the front or rear.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

❶

❷

Labels. The following labels can be found on the cabinet, and serve to communicate the following information:

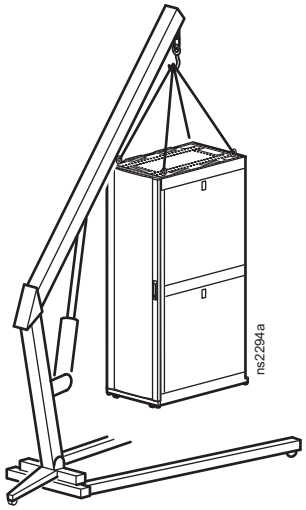
Label ❶: Generic Tip Hazard

Label ❷: Extend Slide-Mounted Hardware One Piece at a Time

Casters. The cabinet can be moved on its casters with up to 1021 kg (2,250 lb) of equipment installed. Once in place, lower the leveling feet. With the leveling feet lowered, the static cabinet can be loaded to 1364 kg (3,000 lb).

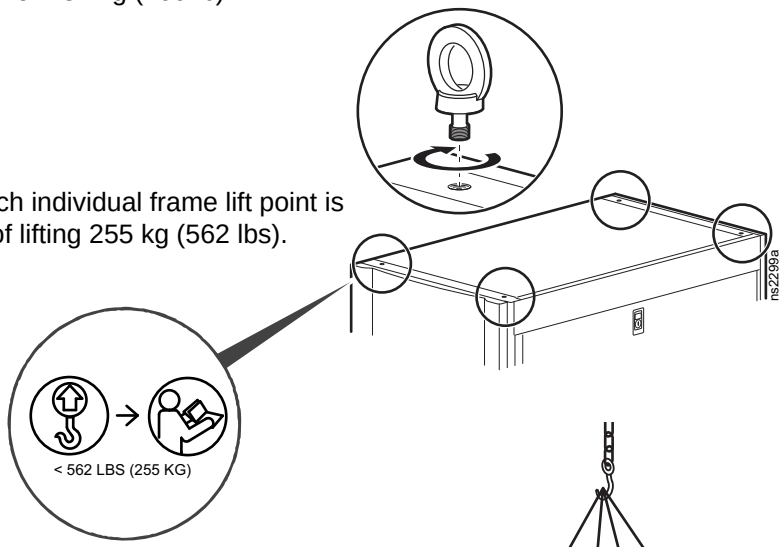
Note: Some labels on cabinet indicate caster related information. See label ❸ to right.

❸

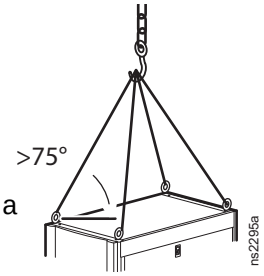


Eye bolts. The cabinet can be lifted using eye bolts with up to 567 kg (1,250 lb) of equipment installed. Use M10 eye bolts with a shoulder rated for 181 kg (400 lb).

Note: Each individual frame lift point is capable of lifting 255 kg (562 lbs).



Note: If using supplemental lifting hardware, ensure the cord length allows for a minimum of a 75° angle, as shown to the right.



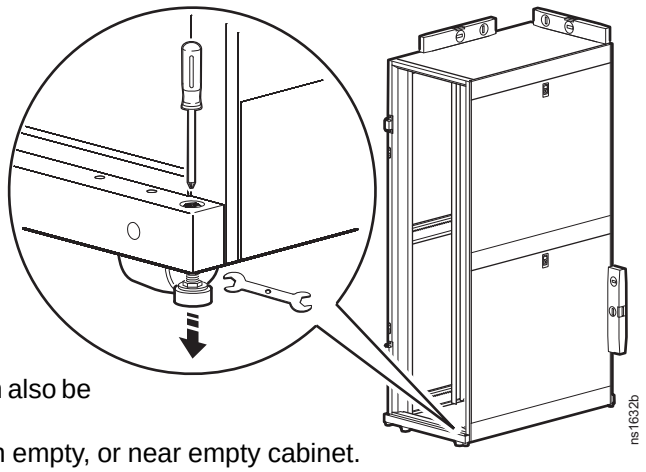
Level the Equipment

Note: The leveling feet at the corners of the equipment provide a stable base if the floor is uneven, but they cannot compensate for a badly sloped surface.

1. Ensure the cabinet is in its intended location. Remove the front and rear doors.
   See “Door Removal” on page 7 for instruction.

   Note: Before removing the front door, unplug the ground wires and any other wire connections that may interfere with the removal of the doors.

2. Insert a Phillips head screwdriver into the screw above the leveling foot. Turn the screw clockwise to extend the leveling foot until it makes firm contact with the floor.



Notes:
1. If loaded with equipment, a 13 mm open ended wrench can also be used to lower the leveling feet.
2. This method works best with an empty, or near empty cabinet.
3. Door removal is not required if using the 13 mm open-ended wrench.

3. Adjust each foot and, using a level, adjust the feet until the cabinet is level and plumb.
4. Install the front and rear doors.

⚠ ⚠ DANGER

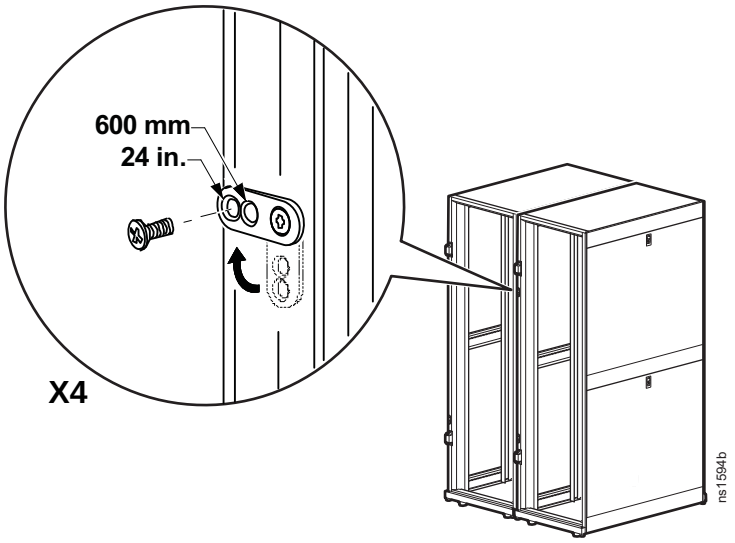
HAZARD OF ELECTRIC SHOCK
When Installing the doors, remember to reconnect all ground and other connection wires.
Failure to follow these instructions will result in death or serious injury.

Join the Cabinets

Join cabinets with the provided brackets to provide alignment and some added stability. Cabinets may be joined with or without the side panels installed.

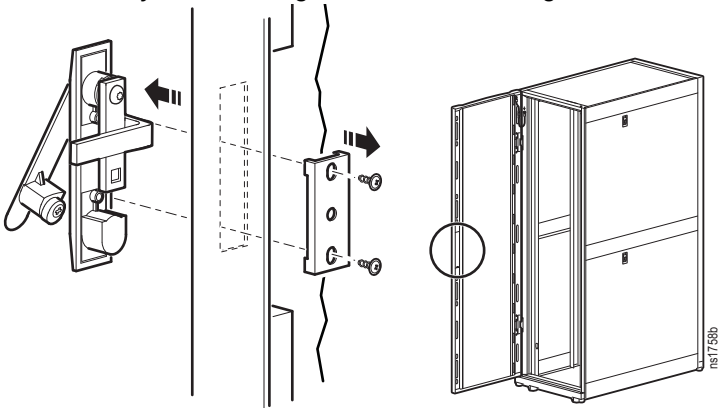
⚠ WARNING
TIP HAZARD Joining cabinets provides limited stability to the cabinets. Make sure you secure the cabinet to the floor before installing equipment. **Failure to follow these instructions can result in death, serious injury, or equipment damage.**

1. Remove the front and rear doors. See “Door Removal” on page 7 for instructions.
2. Choose between 24 in. centers or 600 mm centers (see the detail view below).
3. Align the cabinets and locate the joining brackets. There are two brackets on the front and two brackets on the back of each cabinet.
4. Cabinets are joined using a M5 x 12 countersunk screw, provided in the hardware bag. Using the Phillips head end of the provided tool or a similar tool, insert the screw into the designated hole and tighten.
5. Install the doors. See “Door Installation” on page 7 for instructions.



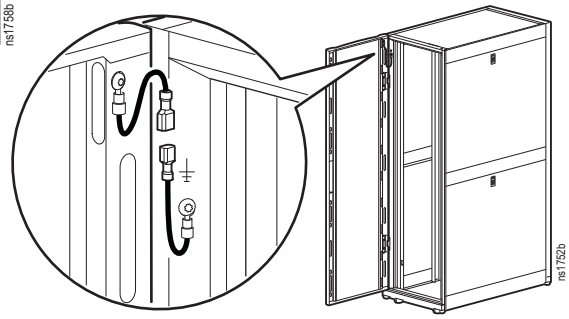
Reverse the Front Door

Note: The front door can be reversed so that the door opens in the other direction. This procedure assumes that initially, when facing the cabinet, the hinges are on the left and the door is opening from right.

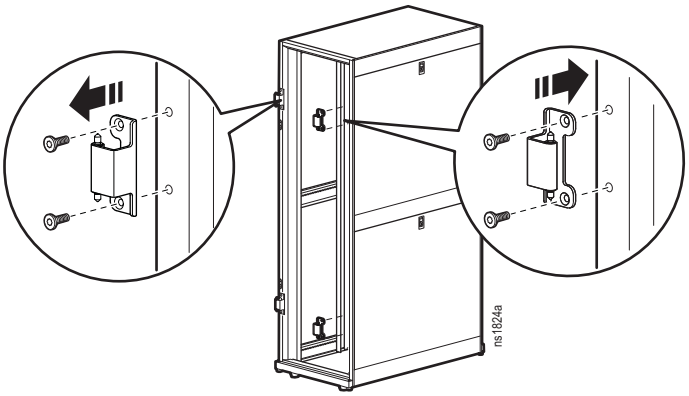


1. Remove the handle by removing the screw-plate. Pull the handle from the door.

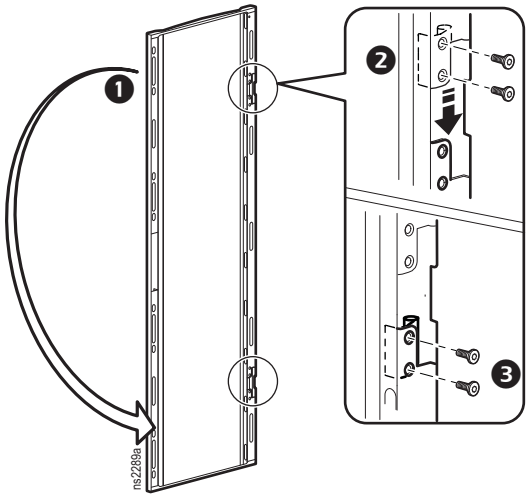
2. Disconnect the ground wire, and any other wire connections. Remove the door from the frame. See “Door Removal” on page 7 for more information.

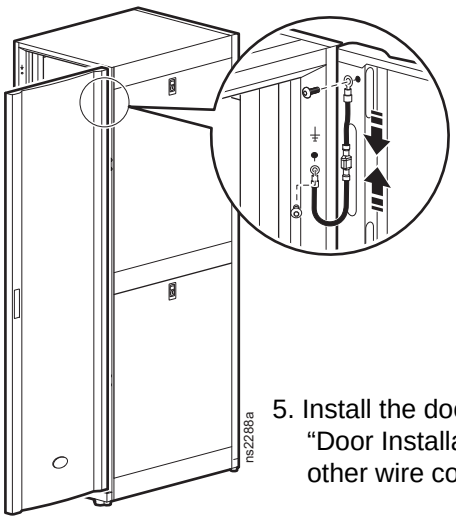


3. Locate the upper hinge on the cabinet frame. Remove the two screws holding the hinge in place. Install the hinge onto the other side of the cabinet frame. Repeat this step for the lower hinge.

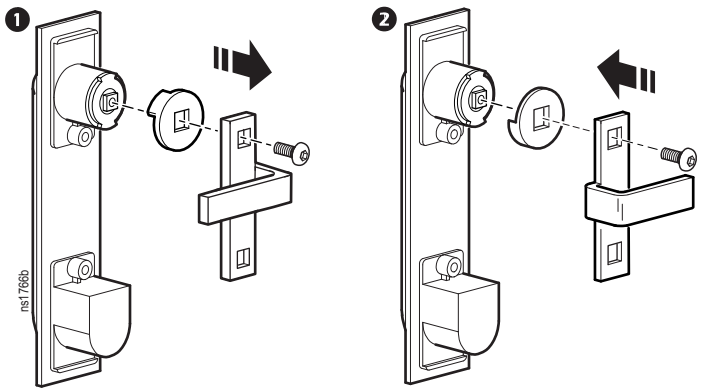


4. Rotate the door as shown ❶. Remove the hinges from the door ❷, and install them to the alternate hole location ❸ as shown. The hinges on door should now align with the hinges on the cabinet.





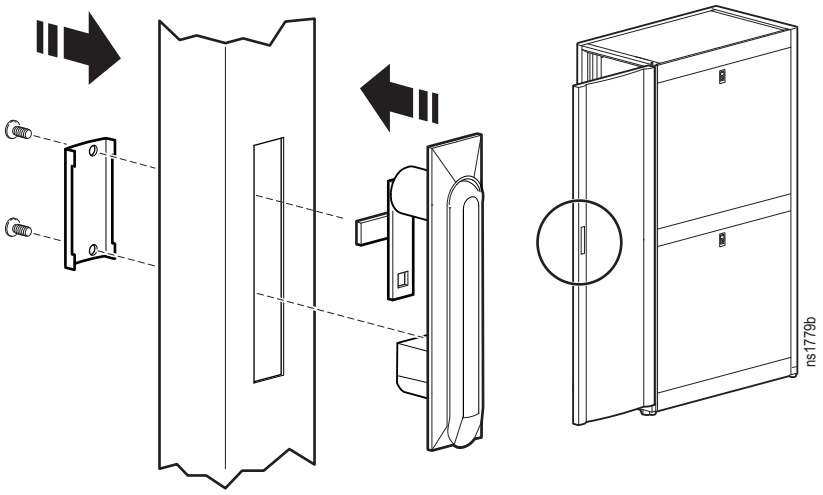
5. Install the door to the hinges now on the reverse side of the cabinet frame. See “Door Installation” on page 7 for instruction. Connect the ground wire and any other wire connections previously disconnected.



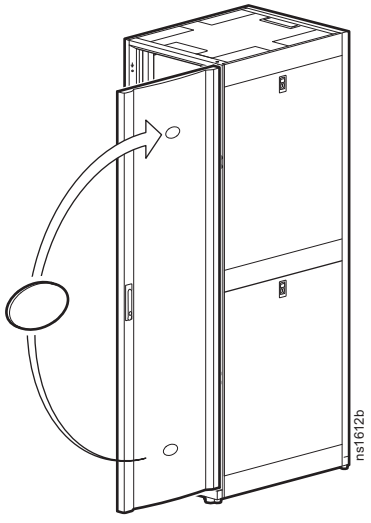
6. Locate the lock handle.

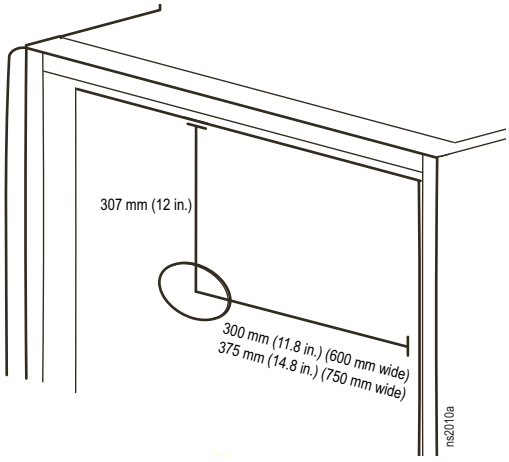
   Remove the cam screw, cam washer, and cam. Rotate the cam washer 90 degrees, and the latch 180 degrees.

   Install the handle on the door.



7. Remove the nameplate (if equipped) from the door. Install the nameplate at the location shown in the illustrations below.





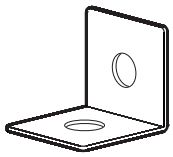
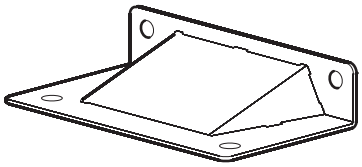
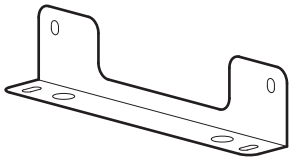
Secure the Cabinet

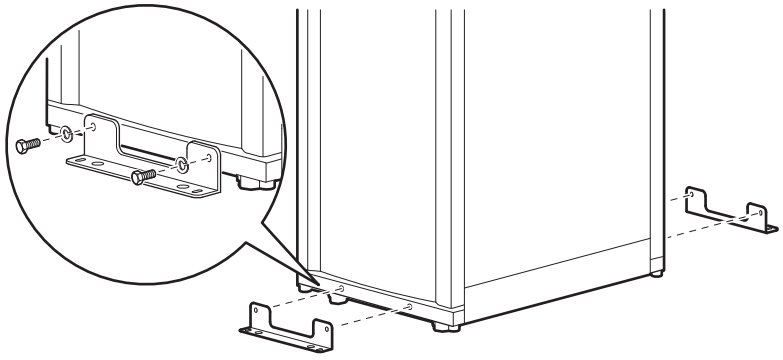
⚠ WARNING

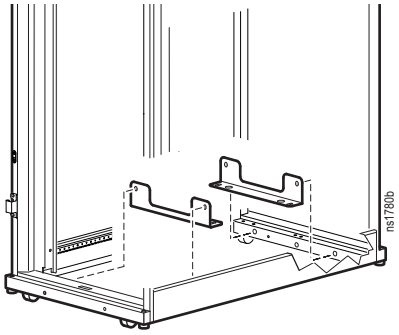
TIP HAZARD
Make sure you secure the cabinet to the floor before installing equipment.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

To secure the cabinet to the floor, use fastener locations on the outside or inside of the cabinet, and choose from the accessories shown below.

Accessory	Part Number	Description	
Bolt-down kit	AR7701	Attaches to rack and floor internally or externally to provide additional stability without blocking cable access.	
NetShelter SX Stabilizer Plate	AR7700	Attaches externally to the rack and floor to provide additional stability.	
Pallet / Bolt-down Brackets	provided with the cabinet	Attaches to the rack, internally or externally, to secure the rack to the floor. This provides additional stability without blocking cable access. With the appropriate mounting hardware, meets IBC/CBC seismic requirements.	



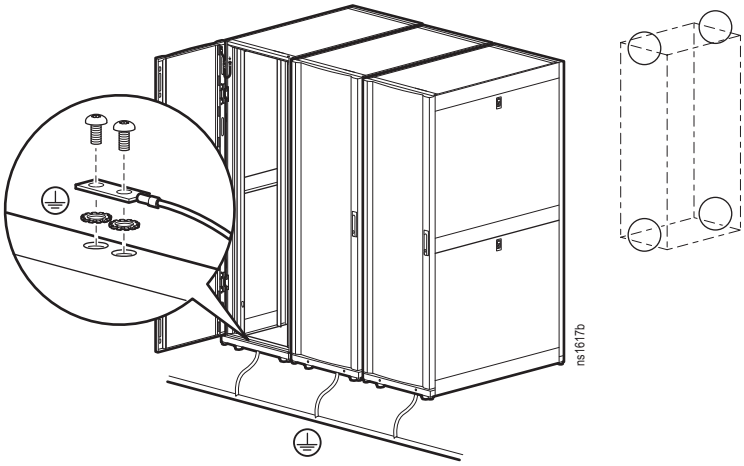


Ground the Cabinet

Each cabinet should be bonded directly to a common ground using one of the designated grounding locations (two M6 threaded inserts) at the top or bottom of the cabinet.

- Use a Common Bonding Network Jumper kit (for example, Listed [KDER] Panduit® RGCBNJ660PY or equivalent).
- Use paint-piercing washers between the ground terminal and the cabinet frame, or remove the paint on the frame under the ground terminals, per NEC NFPA 70 Article 250.12.
- Torque the screws to 6.9 N•m (60 lb-in).

Bonding Locations on the Cabinet



⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK

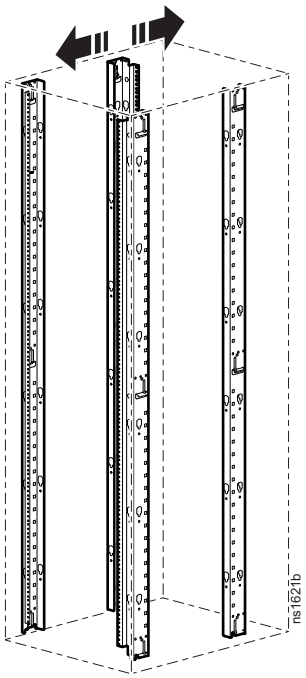
Connection of the cabinet to building Common Bonding Network (CBN) is required.

Failure to follow these instructions will result in death or serious injury.

Equipment Installation

Note: NetShelter SX cabinets are intended for use with Listed equipment. If you install un-Listed equipment, you should evaluate the safety of your configuration.

Adjust the Vertical Mounting Flanges



Vertical mounting flanges come factory-installed at 737 mm (29 in.), the proper location for use with rack-mountable equipment.

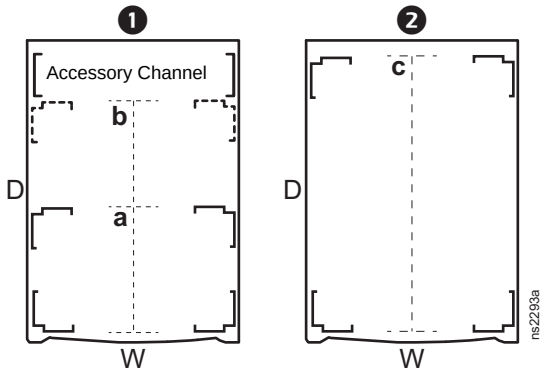
The mounting flanges are adjustable towards the front or the rear of the cabinet to accommodate different rails or equipment with other depths.

A common application for the 750 mm (29.5 in.) wide cabinet is to move the flanges to a depth of 476 mm (18.75 in.) to accommodate networking and telecommunications equipment.

Position the Vertical Mounting Flanges

Note: For a complete listing of models covered in this manual, see “Introduction” on page 1.

- Configuration ❶: The Accessory Channel is installed. The Vertical Mounting Flanges can be installed a minimum distance of (**a**) and can extend as far as (**b**).
- Configuration ❷: The Accessory Channel is removed. The Vertical Mounting Flanges can extend as far as (**c**).



Top View

Models	Cabinet Width (W)	Cabinet Depth (D)	a	b	c
AR310X	600 mm	1070 mm	190.5 mm (7.5 in.)	781.0 mm (30.75 in.)	920.7 mm (36.25 in.)
AR315X	750 mm	1070 mm	285.7 mm (11.25 in.)	781.0 mm (30.75 in.)	920.7 mm (36.25 in.)
AR330X	600 mm	1200 mm	190.5 mm (7.5 in.)	781.0 mm (30.75 in.)	1035.0 mm (40.75 in.)
AR335X	750 mm	1200 mm	285.7 mm (11.25 in.)	787 mm (31 in.)	1047.7 mm (41.25 in.)

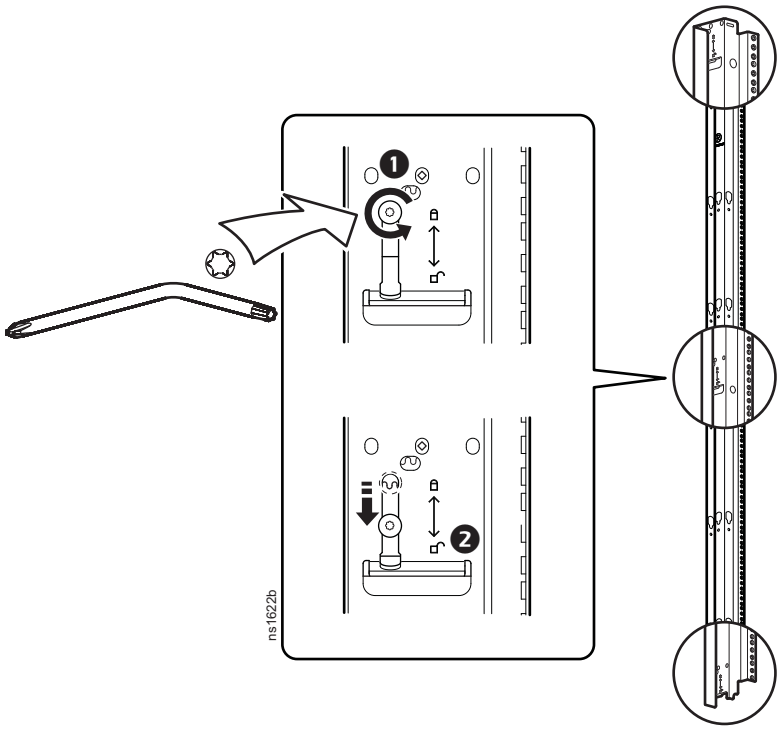
Vertical Mounting Flange Adjustment

⚠WARNING

FALLING EQUIPMENT

Remove all equipment installed on the vertical mounting flanges before performing any adjustments.

Failure to follow these instructions can result in serious injury or equipment damage.

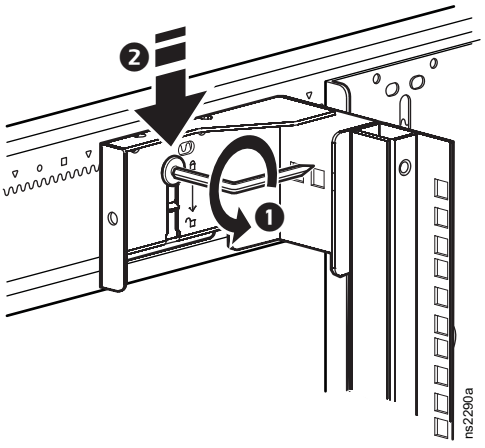


1. Use the provided TORX T30 tool to loosen the top, middle, and bottom TORX screws ❶ holding the vertical mounting flange in place.

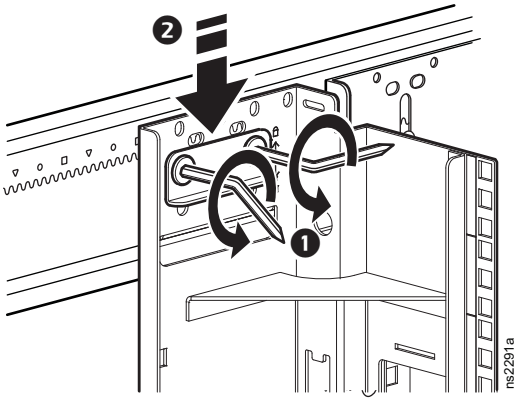
   The brackets, all held in place by the TORX screws, will now be loose.

   Move all three brackets to the designated unlocked position. ❷

   Note: The 600 mm and 750 mm wide cabinets have different brackets. See the illustrations below.



600 mm wide cabinet

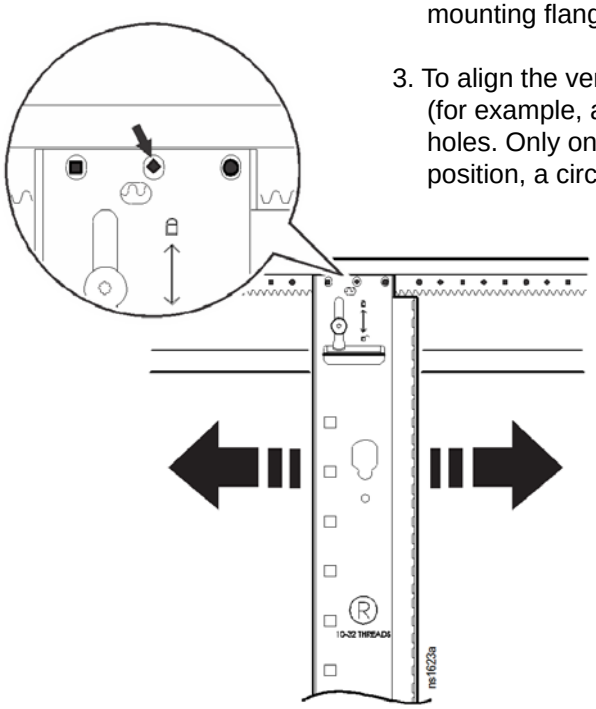


750 mm wide cabinet

2. Move the mounting flange to the desired location. Vertical mounting flanges adjust in 6 mm (1/4 in.) increments.

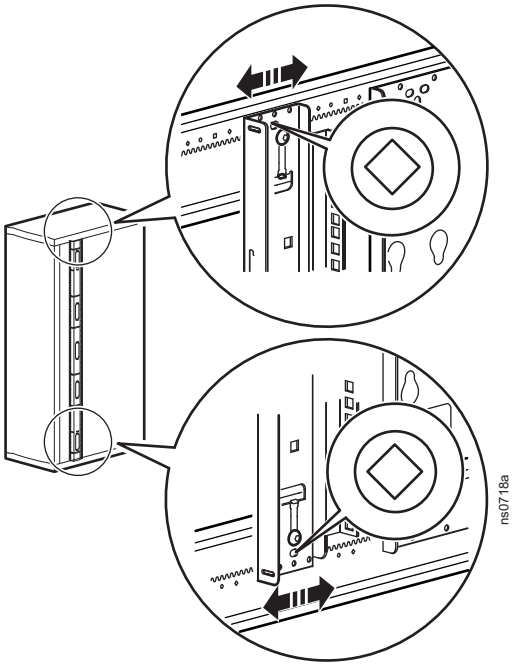
3. To align the vertical mounting flange, note the symbol (for example, a diamond) visible through one of the three holes. Only one symbol will be visible. In the factory standard position, a circle symbol is visible.

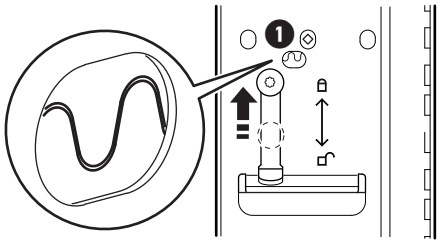
Make sure the same symbol is visible through the corresponding hole at both the top and the bottom of the flange.

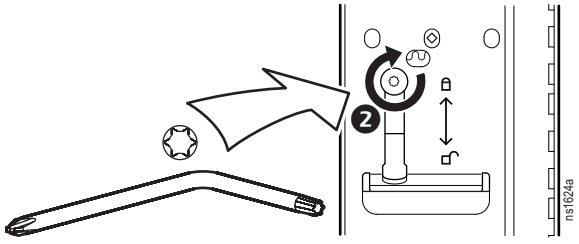


4. When the vertical mounting flange is in the desired location at the top, middle, and bottom, raise the flat bracket to the lock position. The teeth in the bracket will engage fully with the teeth in the side brace. ❶

   Tighten the TORX screws. ❷







Note: On the 750 mm rack, there are circle symbols 476 mm (18.75 in.) behind the front mounting flange. These circle symbols designate rear vertical mounting flange positions required for installation of particular networking and telecommunications equipment.

Install the Equipment

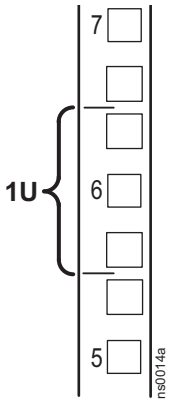
⚠WARNING

TIP HAZARD

- This cabinet is easily tipped. Make sure you have secured the cabinet to the floor before installing equipment.
- Install the heaviest equipment first and toward the bottom of the cabinet to prevent the cabinet from becoming top-heavy.
- Do not extend equipment on sliding rails until you have installed 158 kg (350 lb) of equipment into the bottom of the cabinet for stability or until you have installed the stabilizer plate or bolt-down brackets. Do not extend more than one piece of equipment on sliding rails at a time.

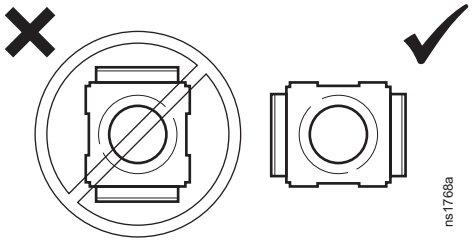
Failure to follow these instructions can result in death, serious injury, or equipment damage.

To install rack-mount equipment in the cabinet:



1. Review the equipment manufacturer's installation instructions.
2. Locate the top and bottom U-space on the vertical mounting rails. Every third hole on the mounting rails is numbered to indicate the middle of a U-space.
3. Install the cage nuts on the interior of the vertical mounting rail; then install the equipment. (To remove a cage nut, squeeze the sides to release it from the square hole.)

Installing cage nuts

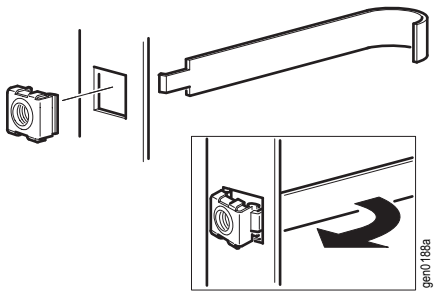


Schneider Electric offers a cage nut hardware kit (AR8100) for use with square holes.

Note: Install cage nuts horizontally, with the ears engaging the sides of the square hole. Do NOT install cage nuts vertically with the ears engaging the top and bottom of the square hole.

1. Insert the cage nut into the square hole by hooking one ear of the cage nut assembly through the far side of the hole.

   Note: Install the cage nuts on the interior of the vertical mounting flange.
2. Place the cage nut tool on the other side of the cage nut and pull to snap it into position.



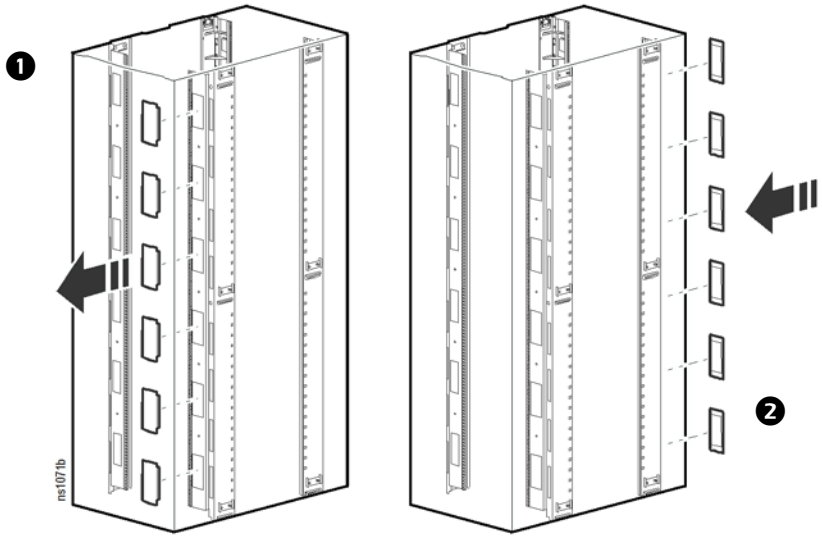
Removing cage nuts

1.Remove any attached screw.

2.Grasp the cage nut and squeeze the sides to release it from the square hole.

Remove the Cable Cutout Covers

For NetShelter SX 750 mm (29.5 in.) wide cabinets that include equipment requiring side airflow, on the side of the cabinet nearest the air intake for the equipment (right side in the example below), remove the cable cutout covers from the front vertical mounting flange. Reinstall the covers in the cable cutout holes on the rear vertical mounting flange on the same side of the cabinet.



Cable Management

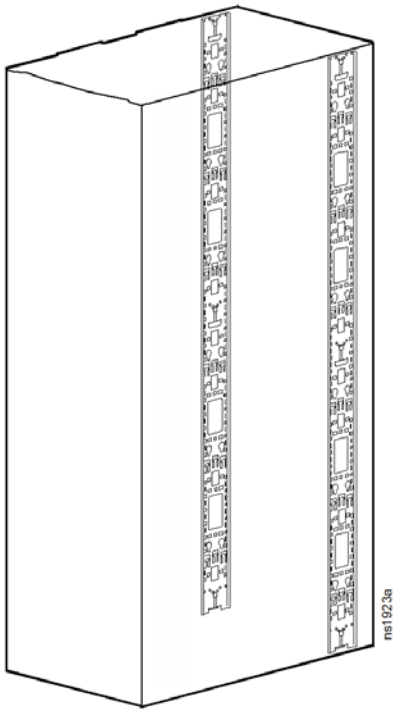
The NetShelter SX cabinet has multiple cable access openings, including on the roof, sides, and bottom. Route, secure, and organize cables using these openings.

In addition, two rear vertical 0U cable organizers, or accessory channels, are included with the cabinet. Further cable management accessories are available. Please see www.apc.com, or contact a Schneider Electric re-seller for more information.

Accessory Channel

The accessory channels provide toolless mounting capabilities for Rack Power Distribution Units and cable management accessories.

There are four Accessory Channels included with the 1200 mm (47.24 in.) deep cabinet. There are two included with all other cabinets. The factory-default position for the accessory channels is in the rear of the cabinet, as shown in the graphic to the right.



The channels also provide tie-off locations for cables, as well as other specific holes for managing cables with many NetShelter brackets, fasteners, and toolless mounting equipment.

Similar to the mounting flanges, the accessory channel can be moved anywhere along the side braces. See “Adjust the Vertical Mounting Flanges” on page 15 for more instruction.

Note: If needed, the accessory channels can be removed. Additional vertical 0U accessory channels are available for order.

Specifications

42U Cabinets

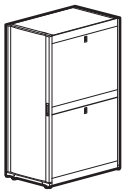
AR3100

AR3150

Height	1991 mm (78.39 in.)	1991 mm (78.39 in.)
Width	600 mm (23.62 in.)	750 mm (29.53 in.)
Depth	1070 mm (42.13 in.)	1070 mm (42.13 in.)
Net weight	125.09 kg (275.20 lb)	155.96 kg (343.10 lb)
Total open area front door	593 018 mm^2 (919.18 in^2)	788 972 mm^2 (1,222.91 in^2)
Total open area rear door	669 276 mm^2 (1,037.38 in^2)	866 920 mm^2 (1,343.73 in^2)
Open area per U front door	14 129 mm^2 (21.90 in^2)	18 787 mm^2 (29.12 in^2)
Open area per U rear door	15 935 mm^2 (24.70 in^2)	20 645 mm^2 (32 in^2)
Perforation pattern	69% open area	69% open area
Perforation pattern front door	66%	88%
Perforation pattern rear door	74%	96%
Clearance for wiring between front door and vertical rail	60.96 mm (2.40 in.)	60.96 mm (2.40 in.)
Weight rating: static load[1]	1363.6 kg (3,000 lb)	1363.6 kg (3,000 lb)
Weight rating: rolling	1022.7 kg (2,250 lb)	1022.7 kg (2,250 lb)

[1] Lower the leveling feet if the static weight is over 1022.7 kg (2,250 lb).

Note: Additional packaging is required if the rack is being shipped with equipment installed. See the NetShelter SX product family page at **www.apc.com** for details on cabinets with shock packaging.

	AR3300	 AR3350
Height	1991 mm (78.39 in.)	1991 mm (78.39 in.)
Width	600 mm (23.62 in.)	750 mm (29.53 in.)
Depth	1200 mm (47.24 in.)	1200 mm (47.24 in.)
Net weight	134.09 kg (295.00 lb)	161.36 kg (355.00 lb)
Total open area front door	593 018 mm^2 (919.18 in^2)	788 972 mm^2 (1,222.91 in^2)
Total open area rear door	669 276 mm^2 (1,037.38 in^2)	866 920 mm^2 (1,343.73 in^2)
Open area per U front door	14 129 mm^2 (21.90 in^2)	18 787 mm^2 (29.12 in^2)
Open area per U rear door	15 935 mm^2 (24.70 in^2)	20 645 mm^2 (32 in^2)
Perforation pattern	69% open area	69% open area
Perforation pattern front door	66%	88%
Perforation pattern rear door	74%	96%
Clearance for wiring between front door and vertical rail	60.96 mm (2.40 in.)	60.96 mm (2.40 in.)
Weight rating: static load[1]	1363.6 kg (3,000 lb)	1363.6 kg (3,000 lb)
Weight rating: rolling	1022.7 kg (2,250 lb)	1022.7 kg (2,250 lb)

[1] Lower the leveling feet if the static weight is over 1022.7 kg (2,250 lb).

Note: Additional packaging is required if the rack is being shipped with equipment installed. See the NetShelter SX product family page at **www.apc.com** for details on cabinets with shock packaging.

45U Cabinets

AR3105

AR3155

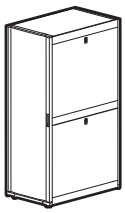
Height	2124 mm (83.62 in.)	2124 mm (83.62 in.)
Width	600 mm (23.62 in.)	750 mm (29.53 in.)
Depth	1070 mm (42.13 in.)	1070 mm (42.13 in.)
Net weight	137 kg (301.40 lb)	155 kg (341 lb)
Total open area front door	635 373 mm^2 (984.83 in^2)	847 212 mm^2 (1313.18 in^2)
Total open area rear door	715 693 mm^2 (1109.33 in^2)	929 528 mm^2 (1440.77 in^2)
Open area per U front door	14 119 mm^2 (21.89 in^2)	18 827 mm^2 (29.18 in^2)
Open area per U rear door	15 904 mm^2 (24.65 in^2)	20 656 mm^2 (32.02 in^2)
Perforation pattern	69% open area	69% open area
Perforation pattern front door	66%	88%
Perforation pattern rear door	74%	96%
Clearance for wiring between front door and vertical rail	60.96 mm (2.40 in.)	60.96 mm (2.40 in.)
Weight rating: static load[1]	1363.6 kg (3,000 lb)	1363.6 kg (3,000 lb)
Weight rating: rolling	1022.7 kg (2,250 lb)	1022.7 kg (2,250 lb)

[1] Lower the leveling feet if the static weight is over 1022.7 kg (2,250 lb).

Note: Additional packaging is required if the rack is being shipped with equipment installed. See the NetShelter SX product family page at **www.apc.com** for details on cabinets with shock packaging.

45U Cabinets, continued

AR3305



AR3355

Height	2124 mm (83.62 in.)	2124 mm (83.62 in.)
Width	600 mm (23.62 in.)	750 mm (29.53 in.)
Depth	1200 mm (47.24 in.)	1200 mm (47.24 in.)
Net weight	141 kg (310.2 lb)	169 kg (371.8 lb)
Total open area front door	635 373 mm^2 (984.83 in^2)	847 212 mm^2 (1313.18 in^2)
Total open area rear door	715 693 mm^2 (1109.33 in^2)	929 528 mm^2 (1440.77 in^2)
Open area per U front door	14 119 mm^2 (21.89 in^2)	18 827 mm^2 (29.18 in^2)
Open area per U rear door	15 904 mm^2 (24.65 in^2)	20 656 mm^2 (32.02 in^2)
Perforation pattern	69% open area	69% open area
Perforation pattern front door	66%	88%
Perforation pattern rear door	74%	96%
Clearance for wiring between front door and vertical rail	60.96 mm (2.40 in.)	60.96 mm (2.40 in.)
Weight rating: static load[1]	1363.6 kg (3,000 lb)	1363.6 kg (3,000 lb)
Weight rating: rolling	1022.7 kg (2,250 lb)	1022.7 kg (2,250 lb)

[1] Lower the leveling feet if the static weight is over 1022.7 kg (2,250 lb).

Note: Additional packaging is required if the rack is being shipped with equipment installed. See the NetShelter SX product family page at **www.apc.com** for details on cabinets with shock packaging.

48U Cabinets

AR3107

AR3157

Height	2258 mm (88.90 in.)	2258 mm (88.90 in.)
Width	600 mm (23.62 in.)	750 mm (29.53 in.)
Depth	1070 mm (42.13 in.)	1070 mm (42.13 in.)
Net weight	138.23 kg (304.10 lb)	169.09 kg (372 lb)
Total open area front door	676 805 mm^2 (1,049.05 in^2)	900 417 mm^2 (1,395.65 in^2)
Total open area rear door	763 637 mm^2 (1,183.64 in^2)	989 243 mm^2 (1,533.33 in^2)
Open area per U front door	14 103 mm^2 (21.86 in^2)	18 761 mm^2 (29.08 in^2)
Open area per U rear door	15 909 mm^2(24.66 in^2)	20 645 mm^2 (32 in^2)
Perforation pattern	69% open area	69% open area
Perforation pattern front door	66%	88%
Perforation pattern rear door	74%	96%
Clearance for wiring between front door and vertical rail	60.96 mm (2.40 in.)	60.96 mm (2.40 in.)
Weight rating: static load[1]	1363.6 kg (3,000 lb)	1363.6 kg (3,000 lb)
Weight rating: rolling	1022.7 kg (2,250 lb)	1022.7 kg (2,250 lb)

[1] Lower the leveling feet if the static weight is over 1022.7 kg (2,250 lb).

Note: Additional packaging is required if the rack is being shipped with equipment installed. See the NetShelter SX product family page at **www.apc.com** for details on cabinets with shock packaging.

48U Cabinets, continued

	AR3307	AR3357
Height	2258 mm (88.90 in.)	2258 mm (88.90 in.)
Width	600 mm (23.62 in.)	750 mm(29.53 in.)
Depth	1200 mm (47.24 in.)	1200 mm (47.24 in.)
Net weight	149.55 kg (329.00 lb)	185.45 kg (408 lb)
Total open area front door	676 805 mm² (1,049.05 in²)	900 417 mm^2 (1,395.65 in^2)
Total open area rear door	763 637 mm² (1,183.64 in²)	989 243 mm^2 (1,533.33 in^2)
Open area per U front door	14 103 mm² (21.86 in²)	18 761 mm^2 (29.08 in^2)
Open area per U rear door	15 909 mm² (24.66 in²)	20 645 mm^2 (32 in^2)
Perforation pattern	69% open area	69% open area
Perforation pattern front door	66%	88%
Perforation pattern rear door	74%	96%
Clearance for wiring between front door and vertical rail	60.96 mm (2.40 in.)	60.96 mm (2.40 in.)
Weight rating: static load[1]	1363.6 kg (3,000 lb)	1363.6 kg (3,000 lb)
Weight rating: rolling	1022.7 kg (2,250 lb)	1022.7 kg (2,250 lb)

[1] Lower the leveling feet if the static weight is over 1022.7 kg (2,250 lb).

Note: Additional packaging is required if the rack is being shipped with equipment installed. See the NetShelter SX product family page at **www.apc.com** for details on cabinets with shock packaging.

Limited Factory Warranty

The limited warranty provided by Schneider Electric in this Statement of Limited Factory Warranty applies only to Products you purchase for your commercial or industrial use in the ordinary course of your business.

Terms of Warranty

Schneider Electric warrants its products to be free from defects in materials and workmanship for a period of five years (two years in Japan) from the date of purchase. Its obligation under this warranty is limited to repairing or replacing, at its sole discretion, any such defective products. This warranty does not apply to equipment that has been damaged by accident, negligence, or misapplication or has been altered or modified in any way. Repair or replacement of a defective product or part thereof does not extend the original warranty period. Any parts furnished under this warranty may be new or factory-remanufactured.

Non-transferable Warranty

This warranty applies only to the original purchaser who must have properly registered the product. Product may be registered at **http://www.warranty.apc.com**.

Exclusions

Schneider Electric shall not be liable under the warranty if its testing and examination disclose that the alleged defect in the product does not exist or was caused by end user's or any third person's misuse, negligence, improper installation or testing. Further Schneider Electric shall not be liable under the warranty for unauthorized attempts to repair or modify wrong or inadequate electrical voltage or connection, inappropriate on-site operation conditions, corrosive atmosphere, repair, installation, start-up by non-Schneider Electric designated personnel, a change in location or operating use, exposure to the elements, Acts of God, fire, theft, or installation contrary to Schneider Electric recommendations or specifications or in any event if the Schneider Electric serial number has been altered, defaced, or removed, or any other cause beyond the range of the intended use.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, BY OPERATION OF LAW OR OTHERWISE, OF PRODUCTS SOLD, SERVICED OR FURNISHED UNDER THIS AGREEMENT OR IN CONNECTION HEREWITH. SCHNEIDER ELECTRIC DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY, SATISFACTION AND FITNESS FOR A PARTICULAR PURPOSE. SCHNEIDER ELECTRIC EXPRESS WARRANTIES WILL NOT BE ENLARGED, DIMINISHED, OR AFFECTED BY AND NO OBLIGATION OR LIABILITY WILL ARISE OUT OF, SCHNEIDER ELECTRIC RENDERING OF TECHNICAL OR OTHER ADVICE OR SERVICE IN CONNECTION WITH THE PRODUCTS. THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES AND REMEDIES. THE WARRANTIES SET FORTH ABOVE CONSTITUTE SCHNEIDER ELECTRIC SOLE LIABILITY AND PURCHASER'S EXCLUSIVE REMEDY FOR ANY BREACH OF SUCH WARRANTIES. SCHNEIDER ELECTRIC WARRANTIES RUN ONLY TO PURCHASER AND ARE NOT EXTENDED TO ANY THIRD PARTIES.

IN NO EVENT SHALL SCHNEIDER ELECTRIC, ITS OFFICERS, DIRECTORS, AFFILIATES OR EMPLOYEES BE LIABLE FOR ANY FORM OF INDIRECT, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, ARISING OUT OF THE USE, SERVICE OR INSTALLATION, OF THE PRODUCTS, WHETHER SUCH DAMAGES ARISE IN CONTRACT OR TORT, IRRESPECTIVE OF FAULT, NEGLIGENCE OR STRICT LIABILITY OR WHETHER SCHNEIDER ELECTRIC HAS BEEN ADVISED IN ADVANCE OF THE POSSIBLY OF SUCH DAMAGES. SPECIFICALLY, SCHNEIDER ELECTRIC IS NOT LIABLE FOR ANY COSTS, SUCH AS LOST PROFITS OR REVENUE, LOSS OF EQUIPMENT, LOSS OF USE OF EQUIPMENT, LOSS OF SOFTWARE, LOSS OF DATA, COSTS OF SUBSTITUANTS, CLAIMS BY THIRD PARTIES, OR OTHERWISE. NO SALESMAN, EMPLOYEE OR AGENT OF SCHNEIDER ELECTRIC IS AUTHORIZED TO ADD TO OR VARY THE TERMS OF THIS WARRANTY. WARRANTY TERMS MAY BE MODIFIED, IF AT ALL, ONLY IN WRITING SIGNED BY AN SCHNEIDER ELECTRIC OFFICER AND LEGAL DEPARTMENT.

Warranty Claims

Customers with warranty claims issues may access the Schneider Electric worldwide customer support network by visiting **http://www.apc.com/support**. Select your country from the country selection pull-down menu. Open the Support tab at the top of the web page to obtain contact information for customer support in your region.

Worldwide Customer Support

Customer support for this or any other product is available at no charge in any of the following ways:

- Visit the Schneider Electric Web site to access documents in the Schneider Electric Knowledge Base and to submit customer support requests.
  - **www.schneiderelectric.com** (Corporate Headquarters)
    Connect to localized Schneider Electric Web sites for specific countries, each of which provides customer support information.
  - **www.schneiderelectric.com/support/**
    Global support searching Schneider Electric Knowledge Base and using e-support.
- Contact the Schneider Electric Customer Support Center by telephone or e-mail.
  - Local, country-specific centers: go to **www.schneiderelectric.com > Support > Operations around the world** for contact information.

For information on how to obtain local customer support, contact the representative or other distributors from whom you purchased your product.

© 2014 Schneider Electric. APC, the APC logo, and NetShelter are owned by Schneider Electric Industries S.A.S., or its affiliated companies. All other trademarks are property of their respective owners.